This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. - 16. (Canceled)

- 17. (Previously presented) Bistable liquid crystal device comprising
 - two outer substrates which, together with a frame, form a cell;
 - · a liquid crystal composition present in said cell;
 - electrode structures with alignment layers on the inside of said outer substrates whereby at least one alignment layer comprises an alignment grating that permits the compounds of said liquid crystal composition to adopt at least two different stable states whereby the assembly of said electrode structures with said alignment layers being such that a switching between the said at least two different stable states is achieved by applying suitable electric signals to said electrode structures;
 - whereby said liquid crystal composition comprises
 - at least 30 weight% (based on the total weight of the composition)
 of a component (α) containing one or more compounds having a
 dielectric anisotropy Δε of at least 25,
 whereby at least 25 weight% (based on the total weight of the
 composition) of said compounds have a dielectric anisotropy Δε of
 at least 40; and
 - at least 5 weight% (based on the total weight of the composition) of a component (β);
 whereby said component (β) comprises at least one compound of formula III and/or at least one compound of formula IV and/or at least one compound of formula V and/or at least one compound of

formula VI and/or at least one compound of formula VII

a and b are independently of each other 0 or 1;

R³¹, R³², R⁴¹, R⁴², R⁵¹, R⁵², R⁶¹, R⁶², R⁷¹ and R⁷² are independently of each other C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other; and

L31 is H or F;

$$\begin{split} Z^{41} & \quad \text{is -CO-O-, -CH}_2\text{O-, -OCH}_2\text{-, -CF}_2\text{O-, -OCF}_2\text{-, -CH}_2\text{CH}_2\text{-, -CF}_2\text{CF}_2\text{-,} \\ & \quad \text{-CH}_2\text{CF}_2\text{-, -CF}_2\text{CH}_2\text{-, -CH}=\text{CH- or -C}=\text{C-;} \end{split}$$

 L^{32} and L^{33}

- 18. (Original) Bistable liquid crystal device according to claim 17 whereby
 said device is a zenithal bistable nematic liquid crystal device;
 and
 - said electrode structures with alignment layers on the inside of said outer substrates have at least one alignment layer that comprises an alignment grating that permits the compounds of said liquid crystal composition to adopt at least two different stable states with different pretilt angles in the same azimuthal plane.

are independently of each other H or F.

19. (Previously presented) Bistable liquid crystal device according to claim 17 whereby said component (α) comprises at least one compound of formula I and/or at least one compound of formula II

c, d, e and f are independently of each other 0, 1, 2, 3 or 4;

R¹¹ is C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other;

R²¹ is C₂-C₁₅ alkenyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C=C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other:

Z¹¹ and Z²¹ are independently of each other a single bond or -C≡C-.

(Previously presented) Bistable liquid crystal device according to claim
 18 whereby said component (α) comprises at least one compound of formula
 VIII

$$R^{8}$$
 CO_{2} Z^{8} CN $VIII$

in which

g and h are independently of each other 0, 1, 2, 3 or 4;

R⁸¹ is C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other;

Z⁸¹ a single bond or -C≡C-.

(Previously presented) Bistable liquid crystal device according to claim
 17 whereby said component (α) comprises at least one compound of formula
 1X

$$R^{91}$$
 G Z^{91} J Z^{92} CN IX

is 0 or 1;

R⁹¹ is C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other;

Z⁹¹ and Z⁹² are independently of each other a single bond or -C≡C-;

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ & & & & \\ & & & & \\$$

in which

 L^{91} , L^{92} , L^{93} and L^{94} are independently of each other H or F.

- 22. (Previously presented) Bistable liquid crystal device according to claim
 17 whereby said liquid crystal composition further comprises
 - at least 3 weight% (based on the total weight of the composition) of a component (γ) containing one or more compounds having an optical anisotropy Δn of at least 0.20.

(Previously presented) Bistable liquid crystal device according to claim
 whereby said component (γ) comprises at least one compound of formula X

$$R^{101}$$
 K R^{102} R^{102} K

in which

 R^{101} and R^{102} are independently of each other $C_1\text{-}C_1\text{-}$ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH_2 groups may be replaced by $\text{-}O_2$, $\text{-}S_2$, $\text{-}CH=\text{-}CH_2$, $\text{-}C=\text{-}C_2$, -CO--O- such that there are no hetero atoms adjacent to each other; and

24. (Previously presented) Bistable liquid crystal device according to claim 17 whereby said liquid crystal composition further comprises at least one compound of formula XI and/or at least one compound of formula XII and/or at least one compound of formula XIII and/or at least one compound of formula XIV

$$\mathsf{R}^{11} \underbrace{\hspace{1.5cm}}^{\mathsf{L}^{111}} \mathsf{Y}^{111} \qquad \qquad \mathsf{X}\mathsf{I}$$

$$R^{121}$$
 L CO_2 M R^{122} XII

8

R¹¹¹ and R¹⁴² are independently of each other C₂-C₁₅ alkenyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other;

- R¹²¹, R¹³¹, R¹³² and R¹⁴¹ are independently of each other C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other:
- R¹²² is C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other:
- Y¹¹¹ is F, Cl, C₁-C₁₅ alkanyl or C₂-C₁₅ alkenyl that are independently of each other mono- or poly-substituted with halogen, or C₁-C₁₅ alkoxy, which is mono- or poly-substituted with halogen;

L¹¹¹ and L¹¹² are independently of each other H or F; and

25. (Previously presented) Bistable liquid crystal device according to claim 17 whereby said liquid crystal composition comprises at least 50 weight% (based on the total weight of the composition) of said component (a).

- 26. (Previously presented) Bistable liquid crystal device according to claim 17 whereby said liquid crystal composition comprises at least 50 weight% (based on the total weight of the composition) of said component (α) whereby at least 30 weight% (based on the total weight of the composition) of said compounds have a dielectric anisotropy Δε of at least 40.
- 27. (Currently Amended) Bistable liquid crystal device according to elaim 17 claim 19 whereby said liquid crystal composition comprises at least one compound of formula II of said component (α) and at least 8 weight% (based on the total weight of the composition) of said component (β).
- 28. (Previously presented) Bistable liquid crystal device according to claim 22 whereby said liquid crystal composition comprises at least 5 weight% (based on the total weight of the composition) of said component (γ).
- 29. (Previously presented) Bistable liquid crystal device according to claim 17 whereby said liquid crystal composition comprises at least one compound of formula XV and/or of formula XVI and/or XVII and/or of formula XVIII and/or of formula XIX and/or of formula XX and/or of formula XXII and/or of formula XXII:

$$R^{16} \longrightarrow Z^{15} \longrightarrow Z^{15} \longrightarrow XV$$

$$R^{16} \longrightarrow Z^{16} \longrightarrow Z^{16} \longrightarrow Z^{16} \longrightarrow XVI$$

$$R^{17} \longrightarrow R^{172} \longrightarrow XVII$$

$$\mathsf{R}^{191} \underbrace{\hspace{1cm}}_{\mathsf{L}^{192}} \mathsf{Y}^{191} \qquad \mathsf{XIX}$$

$$R^{201}$$
 V^{201} V^{2

$$\mathsf{R}^{211} \underbrace{ \left(\begin{array}{c} \mathsf{L}^{213} \\ \mathsf{L}^{214} \\ \mathsf{L}^{212} \end{array} \right)}^{\mathsf{L}^{213}} \mathsf{V}^{211}$$
 XXI

$$\mathsf{R}^{221} \underbrace{\hspace{1cm}}_{\mathsf{L}^{223}} \underbrace{\hspace{1cm}}_{\mathsf{L}^{222}}^{221} \mathsf{XXII}$$

$$R^{151}, R^{161}, R^{171}, R^{172}, R^{181}, R^{182}, R^{201}, R^{211} \text{ and } R^{221}$$

are independently of each other $C_1\text{-}C_1\text{-}s$ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH_2 groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other:

 R^{191} is C_1 - C_{15} alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH_2 groups may be replaced independently of each other by -O-, -S-, - $C\equiv C$ -, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other (i.e. R^{191} does not represent an alkenyl

radical); Y^{151} , Y^{161} , Y^{191} , Y^{201} , Y^{211} and Y^{221} are independently of each other F, Cl. C1-C15 alkanyl or C2-C15 alkenyl that are independently of each other mono- or poly-substituted with halogen, or C1-C15 alkoxy which is mono- or poly-substituted with halogen; $L^{151}, L^{161}, L^{191}, L^{192}, L^{201}, L^{202}, L^{203}, L^{204}, L^{211}, L^{212}, L^{213}, L^{214}, L^{215}, L^{216}, L^{221}, L^{211}, L^{212}, L^{213}, L^{214}, L^{215}, L^{216}, L^{221}, L^{211}, L^{212}, L^{213}, L^{214}, L^{215}, L^{216}, L^{221}, L^{212}, L^{213}, L^{214}, L^{215}, L^{216}, L^{211}, L^{212}, L^{213}, L^{214}, L^{215}, L^{216}, L^{211}, L^{212}, L^{213}, L^{214}, L^{215}, L^{216}, L^{211}, L^{212}, L^{212}, L^{213}, L^{214}, L^{215}, L^{214}, L^{215}, L$

L222, L223 and L224 are independently of each other H or F; and Z^{151} is -CO-O-, CH₂O or CF₂O.

- 30. (Previously presented) A method comprising displaying information and/or images on a bistable liquid crystal display device, wherein the device comprises a cell containing a liquid crystal composition which comprises:
 - at least 30 weight% (based on the total weight of the composition) of a component (a) containing one or more compounds having a dielectric anisotropy $\Delta \varepsilon$ of at least 25, whereby at least 25 weight% (based on the total weight of the composition) of said compounds have a dielectric anisotropy $\Delta \epsilon$ of at least 40; and
 - at least 5 weight% (based on the total weight of the composition) of a component (B):

whereby said component (β) comprises at least one compound of formula III and/or at least one compound of formula IV and/or at least one compound of formula V and/or at least one compound of formula VI and/or at least one compound of formula VII:

$$R^{31} \underbrace{\hspace{1.5cm} \left(\begin{array}{c} A \\ \end{array} \right) \underbrace{\hspace{1.5cm} \left[\begin{array}{c} A \\ \end{array} \right]}_{D} \underbrace{\hspace{1.5cm} \left(\begin{array}{c} C \\ \end{array} \right)}_{D} \underbrace{\hspace{1.5cm} \left(\begin{array}{c} C \\ \end{array} \right)}_$$

$$R^{51}$$
 R^{51}
 R^{52}
 R^{52}

a and b are independently of each other 0 or 1;

R³¹, R³², R⁴¹, R⁴², R⁵¹, R⁵², R⁶¹, R⁶², R⁷¹ and R⁷² are independently of each other C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other:

L31 is H or F;

 Z^{41} is -CO-O-, -CH₂O-, -OCH₂-, -CF₂O-, -OCF₂-, -CH₂CH₂-, -CF₂CF₂-, -CH₂CF₂-, -CF₂CH₂-, -CH=CH- or -C≡C-;

13

L³² and L³³ are independently of each other H or F.

- (Previously presented) The method of claim 30 whereinsaid bistable liquid crystal display device is a zenithal bistable nematic liquid crystal display device.
- 32. (Previously presented) The method of claim 30, wherein said component (a) comprises at least one compound of formula I and/or at least one compound of formula II

in which

c, d, e and f are independently of each other 0, 1, 2, 3 or 4; $R^{11} \quad \text{is $C_1\text{-}C_{15}$ alkyl which is unsubstituted or mono- or poly-substituted} \\ \quad \text{with CN or halogen and in which one or more of the CH_2 groups may} \\ \quad \text{be replaced independently of each other by -O-, -S-, -CH=CH-, -C=C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each$

other:

R²¹ is C₂-C₁₅ alkenyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C\(\subseteq\)CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other:

 Z^{11} and Z^{21} are independently of each other a single bond or -C \equiv C-.

33. (Previously presented) The method of claim 30, wherein said component (α) comprises at least one compound of formula VIII

$$\mathbb{R}^{6}$$
 CO_2 \mathbb{Z}^{61} CN VIII

in which

g and h are independently of each other 0, 1, 2, 3 or 4;

R⁸¹ is C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O₋, -S₋, -C≡C₋, -CO-O₋, -OC-O₋ such that there are no hetero atoms adjacent to each other;

Z⁸¹ is a single bond or -C≡C-.

34. (Previously presented) The method of claim 30, wherein said component (α) comprises at least one compound of formula IX

$$H^{91}$$
 G Z^{91} J Z^{92} CN IX

in which

i is 0 or 1:

R⁹¹ is C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other; Z^{91} and Z^{92} are independently of each other a single bond or

$$C\equiv C$$
;

 G

is

 L^{91}
 L^{92} ;

 L^{93}
 L^{94} ;

in which

 L^{91} , L^{92} , L^{93} and L^{94} are independently of each other H or F.

- 35. (Previously presented) The method of claim 30, wherein said liquid crystal composition further comprises
- at least 3 weight% (based on the total weight of the composition) of a component (γ) containing one or more compounds having an optical anisotropy Δn of at least 0.20.
- 36. (Previously presented) The method of claim 35, wherein said component (γ) comprises at least one compound of formula X:

16

in which

k is 0, 1, 2, 3 or 4;

 R^{101} and R^{102} are independently of each other $C_1\text{-}C_{15}$ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH_2 groups may be replaced by -O-, -S-, -CH=CH-, -C=C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other; and

37. (Previously presented) The method of claim 30, wherein said liquid crystal composition further comprises at least one compound of formula XI and/or at least one compound of formula XIII and/or at least one compound of formula XIII at least one compound of formula XIV:

$$R^{121}$$
 L CO_2 M R^{122} XII

$$R^{141}$$
 \rightarrow R^{142} XIV

in which

 R^{111} and R^{142} are independently of each other $C_2\text{-}C_{15}$ alkenyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH $_2$ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C=C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other;

 R^{121} , R^{131} , R^{132} and R^{141} are independently of each other C_1 - C_{15} alkyl which is

17

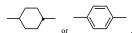
unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH_2 groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C=C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other;

- R¹²² is C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other:
- $Y^{111} \quad \text{is F, Cl, C}_{1}\text{-}C_{15} \text{ alkanyl or C}_{2}\text{-}C_{15} \text{ alkenyl that are independently of}$ each other mono- or poly-substituted with halogen, or C}_{1}\text{-}C_{15} \text{ alkoxy,} which is mono- or poly-substituted with halogen;

L¹¹¹ and L¹¹² are independently of each other H or F; and

$$-$$
L and $-$ M

are independently of each other



- 38. (Previously presented) The method of claim 30, wherein said liquid crystal composition comprises at least 50 weight% (based on the total weight of the composition) of said component (a).
- 39. (Previously presented) The method of claim 30, wherein said liquid crystal composition comprises at least 50 weight% (based on the total weight of the composition) of said component (α) whereby at least 30 weight% (based on the total weight of the composition) of said compounds have a dielectric anisotropy Δε of at least 40.
- 40. (Previously presented) The method of claim 32, wherein said liquid crystal composition comprises at least one compound of formula II of said

component (α) and at least 8 weight% (based on the total weight of the composition) of said component (β).

- 41. (Previously presented) The method of claim 35, wherein said liquid crystal composition comprises at least 5 weight% (based on the total weight of the composition) of said component (γ).
- 42. (Previously presented) The method of claim 30, wherein said liquid crystal composition further comprises at least one compound of formula XV and/or of formula XVII and/or of formula XVII and/or of formula XXI and/or of formula XXI and/or of formula XXII:

$$R^{181} \longrightarrow Z^{151} \longrightarrow Y^{161} \qquad XV$$

$$R^{181} \longrightarrow R^{172} \longrightarrow XVII$$

$$R^{181} \longrightarrow R^{182} \longrightarrow Y^{191} \longrightarrow XIX$$

$$R^{191} \longrightarrow Z^{151} \longrightarrow Z^{151$$

$$R^{21} \underbrace{ \begin{array}{c} L^{215} \\ L^{216} \\ L^{214} \\ \end{array} }_{L^{212}} Y^{211}$$
 XXI

$$R^{151}$$
, R^{161} , R^{171} , R^{172} , R^{181} , R^{182} , R^{201} , R^{211} and R^{221}

are independently of each other C_1 - C_1 s alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH_2 groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C \equiv C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other:

- R^{191} is $C_1\text{-}C_{15}$ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH_2 groups may be replaced independently of each other by -O-, -S-, -C=C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other;
- $Y^{151},Y^{161},Y^{191},Y^{201},Y^{211}$ and Y^{221} are independently of each other F, $Cl,\,C_1\text{-}C_1\text{s} \text{ alkanyl or }C_2\text{-}C_1\text{s} \text{ alkenyl that are independently of}$ each other mono- or poly-substituted with halogen, or $C_1\text{-}C_1\text{s}$ alkoxy, which is mono- or poly-substituted with halogen;

43. (Previously presented) A liquid crystal medium comprising:

 at least 15%, by weight of the total medium, of at least one compound of formula I

$$R^{11}$$
 CO_2 Z^{11} CN $(F)_d$

in which

c and d are independently of each other 0, 1, 2, 3 or 4;

R¹¹ is C₁-C₁₅ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C=C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other; and

Z¹¹ is a single bond or -C≡C-, and

at least one compound of formula II

$$R^{2}$$
 CO_{2} Z^{2} CN CO_{2} CO_{2}

in which

e and f are independently of each other 0, 1, 2, 3 or 4;

R²¹ is C₂-C₁₅ alkenyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other;

Z²¹ is a single bond or -C≡C-; and

 at least 5%, by weight of the total medium, of one or more compounds of the formula IIID or IIIE:

 R^{31} and R^{32} are independently of each other $C_1 \cdot C_{15}$ alkyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C=C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other.

44. (Canceled)

45. (Currently Amended) Bistable liquid crystal device according to claim 17 whereby said component (α) comprises at least one compound of formula II:

$$\mathbb{R}^{2l}$$
 CO_2 \mathbb{Z}^{2l} CN \mathbb{I}

in which

e and f are independently of each other 0, 1, 2, 3 or 4;

R²¹ is C₂-C₁₅ alkenyl which is unsubstituted or mono- or poly-substituted with CN or halogen and in which one or more of the CH₂ groups may be replaced independently of each other by -O-, -S-, -CH=CH-, -C≡C-, -CO-O-, -OC-O- such that there are no hetero atoms adjacent to each other; and

Z21 Z21 is a single bond or -C≡C-.